INSTALLATION AND INSTRUCTION

FINE TUNE NUT LOCK

Congratulations! You have just purchased a uniquely designed, precision crafted Fender guitar accessory. The **F**ine **T**une **N**ut **L**ock was designed to help solve the tuning problems you may have experienced while using your guitars floating tremolo system.

What makes the **FTNL** so special is that you can install it, easily, without performing major surgery to your guitar—it works with your guitar's existing tremolo bridge.

The **FTNL** can be installed on the headstock of all Fender Stratocaster guitars, except those using the bullet truss rod nut (a replacement nut will be available soon so that it is usable on those models as well). If you have an older instrument and are concerned about lowering its value by installing the **FTNL**, you should consider purchasing a replacement neck from your Fender dealer and installing it on that. Whatever you decide, make sure to read the following instructions for installation and usage. If you do you'll find that your tremolo has never worked better.

INSTALLATION

For installation you'll need the following tools:

Ruler, machinist scale or cardboard spacer (supplied)
3/32" (2.35mm) drill bit
5/64" (2mm) drill bit
Drill stops, marker or masking tape
Drill (electric or hand)
Fine line marker or pencil
Drill punch, awl or scribe
#1 Philips screwdriver
3mm Hex wrench (supplied)

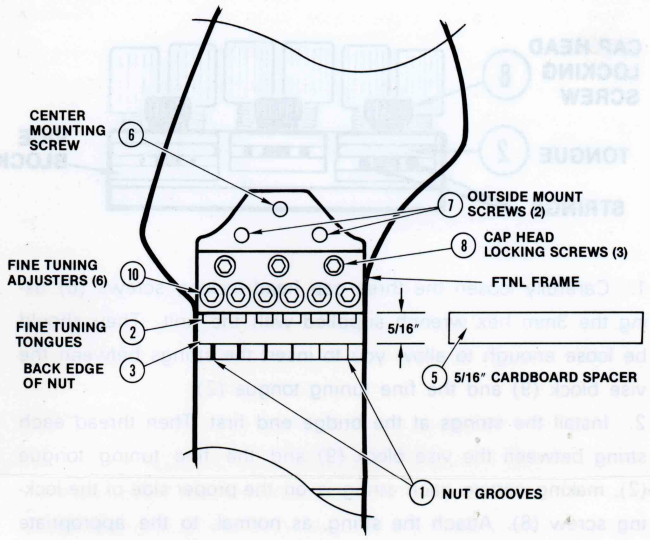
Other tools helpful but not essential for installation;
Set of nut groove files; fine sandpaper (400 grit); bar soap; lubricant; appropriate neck adjusting tools.

1. Check your neck curvature to make certain the truss rod is properly adjusted. There should be a slight concave curvature in the neck for proper playability. Press the 6th string at the first and last frets — there should be no more than a .018" and no less than a .008" gap between the bottom of the string and the top of the 7th and 8th frets. The gap should diminish as you go towards the nut and/or the bridge.

If you are installing this unit on a Elite or Standard Stratocaster you cannot adjust the truss rod with the **FTNL** mounted in its correct position, however the **FTNL** can be easily removed for future neck adjustment.

2. Remove your strings. It is best you discard them as new strings are much easier to install with the **FTNL**. When you're ready to restring it's important to use the same gauge strings that you had on the instrument when you adjusted the truss rod.

3. Check the nut grooves (1) — make certain they are smooth and slightly larger than the string gauges you are using (this is to insure that the strings won't bind up in the grooves, which will effect the instruments ability to stay in tune when using the tremolo). You should also put lubricant in the grooves — Vaseline or Chap-stick both work great and are readily available.



4. Rest the guitar on a clean flat surface. Place the **FTNL** on the face of the headstock with the tongues (2) facing towards the back edge of the nut (3) (check illustration sheet if you are in doubt about any part mentioned). Using a ruler, machinists scale or the cardboard spacer provided set the **FTNL** so that the front edge of the frame (4) is 5/16" (8mm) from the back edge of the nut (3). With a fine line marker or pencil make a mark in the center of the center mounting hole (6). Remove the spacer and align the fine tuning tongues (2) with the string grooves (1) in the nut so that they are centered as closely as possible. Take care to keep the mark you made centered from front to back in the center mounting hole (6).

5. Once the **FTNL** is properly positioned use a drill punch, awl, or scribe, to place a mark on the face of the headstock in the center of the center mounting hole (6).

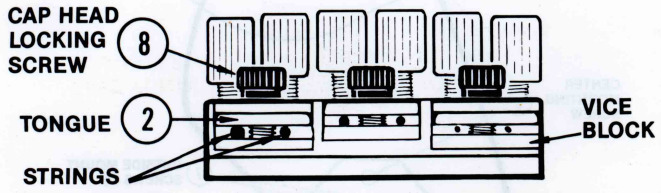
6. Remove the **FTNL** from the surface of the headstock. Take your 3/32" (2.35mm) drill bit and measure 5/16" (8mm) from the tip and mark it carefully with a marker or wrap it in tape at this line — if you have drill bit stops use them (the reason for using any of these methods is to keep you from drilling through the headstock). Using a hand or electric drill carefully drill the hole marked in step 4 — remember to watch your drill bit mark and don't drill to deep.

7. Using the largest of the three screws install the **FTNL**. Do not tighten the screw fully, so that you can check your alignment before installing the two outside mounting screws (7).

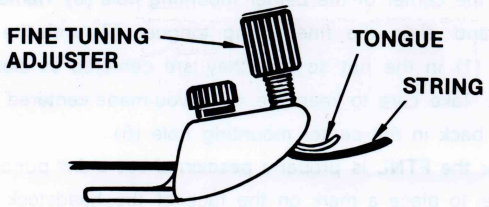
Once it is properly aligned tighten the screw. It is wise to put a small amount of bar soap on the threads of the screws as this eases installation ahd reduces the chance of cracking the headstock or breaking the screw off in the hole. If the screw is excessively hard to turn, back it out and check to see if you have used the correct drill bit and have drilled to the proper depth.

8. Using your drill punch or marking tool, mark the centers of the two outside mounting screw holes (7). Use a 5/64" (2mm) drill bit and follow the same method for drilling as outlined in step 5 — once again being very carefull not to drill through the headstock.
9. Install the remainihg two screws and tighten.
10. You are now ready to string up your guitar.

USING THE FTNL



1. Carefully loosen the three cap head locking screws (8) using the 3mm hex wrench supplied with the unit. They should be loose enough to allow you to insert the strings between the vise block (9) and the fine tuning tongue (2).
2. Install the strings at the bridge end first. Then thread each string between the vise block (9) and the fine tuning tongue (2), making certain each string is on the proper side of the locking screw (8). Attach the string, as normal, to the appropriate tuning machine.
3. Tighten each locking screw (8) so that the strings are just barely being touched — you don't want them locked just yet. You should be able to use the tuning machines to tune the guitar, but you want to have the strings as close as possible to the position they'll be in when the system is locked.



4. Adjust the fine tuners (10) so that the tongue (2) is in the center of its adjustment range — this allows you to adjust flat or sharp after the strings are locked.
5. Using the tuning machines, tune the guitar up to pitch — if the pitch doesn't change **STOP** tuning and check the locking screw (8) to make sure that it's not too tight (otherwise carry a lot of extra strings). At this time you are going to want to stretch the strings and re-tune, repeating until the strings are settled in. This is also the time to set the intonation, adjust the bridge height, tremolo travel, etc. — in short make sure all the adjustments are set and the strings are settled in and stretched out before you lock the strings.
6. Tighten the three cap head locking screws (8) until all the strings are locked. There should be almost no change in tuning. If there is a major difference, go back to step #3 of the "Use" section and check to see that you've correctly followed the instructions.
7. If all checks out — **Play**! If you're having trouble staying in tune when you use the tremolo, check your strings to make sure they're stretched out and broken in. If that checks out okay, make sure the strings are not binding in the nut grooves (re-read #3 of the installation section). When everything's all set you should notice a dramatic improvement in your guitars performance.

Just a couple of quick notes .... after the **FTNL**'s locked use it's tuners to tune with not your tuning machines; take good care of the unit (a little Vaseline or lubricant on the threads of the fine tuning screws from time to time will help the performance and insure long life of the part); and, even though the **FTNL** will make your tremolo a lot easier to live with, there is **nothing** that will keep any guitar perfectly in tune.

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